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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,843	07/16/2003	Shinji Matsushita	03418/LH	1800

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EXAMINER

YODER III, CHRISS S

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/621,843

Applicant(s)

MATSUSHITA, SHINJI

Examiner

Chriss S. Yoder, III

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 6 and 14 are objected to because of the following informalities:

Claim 6 is written to be dependent on claim 10, however, claim 6 is identical to claim 15, which already depends from claim 10. Therefore, the Examiner believes claim 6 should depend from claim 1, and will be examined as understood by the examiner.

Claim 14 is written to be dependent on claim 1, however, claim 14 is identical to claim 5, which already depends from claim 1. Therefore, the Examiner believes claim 14 should depend from claim 10, and will be examined as understood by the examiner.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sannoh et al. (US PGPub # 2002/0149689).
2. In regard to claim 1, note Sannoh discloses the use of an imaging device, comprising an electronic camera which images an observation image (paragraph 0030 and figure 1), a display which displays the observation image imaged by the electronic camera and photograph information of the observation image (paragraph 0042 and

figure 1:17), and a display setting portion which controls the display and sets display of the photograph information (paragraphs 0041-0042).

Therefore, it can be seen that Sannoh fails to disclose that the imaging device is used with a microscope. Official Notice is taken that the concepts and advantages of using a digital camera with a microscope are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to be used in conjunction with a microscope in order to provide a real time display of microscopic objects to more than one user through the use of a display means as well as allowing the storage of a permanent copy of the observed image by recording the captured data.

3. In regard to claim 2, note Sannoh discloses that the display setting portion sets at least one of a line color, a line width and a line type (paragraph 0044).

4. In regard to claim 3, note Sannoh discloses that the photograph information of the observation image includes at least one of a photometry, a focus, a color balance and a scale (paragraph 0043).

5. In regard to claim 4, note Sannoh discloses that the display setting portion sets at least one of a line color, a line width and a line type (paragraph 0044).

6. In regard to claim 5, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information and adjusts the color of the photograph information (paragraph 0044). Therefore, it can be seen that Sannoh fails to disclose the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the

Art Unit: 2622

observation image. Official Notice is taken that the concepts and advantages of using a complementary color generator to adjust the color of data that is to be displayed along with the image based on the color of the background of the image are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color.

7. In regard to claims 6-7, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information, as claimed in claim 1 above. Therefore, it can be seen that the Sannoh device lacks the use of a color determination unit which determines a color for each one pixel of a background image of the observation image, a histogram computing unit which computes a histogram for each color determined by the color determination unit, and that the display controller sets a display color of a plurality of sets of the photograph information based on the computed histogram. Official Notice is taken that the concepts and advantages of using a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image in order to adjust the display color of photograph information are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a color determination unit and histogram computing unit to calculate the

number of pixels of each color within an image to adjust the display color of photograph information in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color.

8. In regard to claim 8, note Sannoh discloses the use of a display pattern generator which generates a pattern for displaying a plurality of sets of the photograph information (paragraph 0044).

9. In regard to claim 9, note Sannoh discloses the use of a display pattern memory which memorizes a predetermined display pattern as a table (paragraph 0033 and 0051, and figure 3).

10. In regard to claim 10, note Sannoh discloses the use of an imaging device comprising an electronic camera which images an observation image captured (paragraph 0030 and figure 1), and a display which displays the observation image imaged by the electronic camera and a plurality of sets of photographic information concerning the observation image (paragraph 0042-0044 and figure 1:17).

Therefore, it can be seen that Sannoh fails to disclose that the imaging device is used with a microscope. Official Notice is taken that the concepts and advantages of using a digital camera with a microscope are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to be used in conjunction with a microscope in order to provide a real time display of microscopic objects to more than one user through the

use of a display means as well as allowing the storage of a permanent copy of the observed image by recording the captured data.

11. In regard to claim 11, note Sannoh discloses that at least one of a line color, a line width and a line type displayed on the display of the plurality of sets of photograph information is settable (paragraph 0044).

12. In regard to claim 12, note Sannoh discloses that a plurality of sets of the photograph information concerning the observation image includes at least one of a photometry, a focus, a color balance and a scale (paragraph 0043).

13. In regard to claim 13, note Sannoh discloses that at least one of a line color, a line width and a line type displayed on the display of the plurality of sets of photograph information is settable (paragraph 0044).

14. In regard to claim 14, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information and adjusts the color of the photograph information (paragraph 0044). Therefore, it can be seen that Sannoh fails to disclose the use of a complementary color generator which sets a display color of the photograph information to a complementary color of a background image of the observation image. Official Notice is taken that the concepts and advantages of using a complementary color generator to adjust the color of data that is to be displayed along with the image based on the color of the background of the image are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a complementary color generator which sets a display color of the photograph information

to a complementary color of a background image of the observation image in order to prevent the photograph information from disappearing in the image in case when the image background and the photograph information are the same color.

15. In regard to claims 15-16, note Sannoh discloses the use of an imaging device that displays the observation image along with photograph information, as claimed in claim 1 above. Therefore, it can be seen that the Sannoh device lacks the use of a color determination unit which determines a color for each one pixel of a background image of the observation image, a histogram computing unit which computes a histogram for each color determined by the color determination unit, and that the display controller sets a display color of a plurality of sets of the photograph information based on the computed histogram. Official Notice is taken that the concepts and advantages of using a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image in order to adjust the display color of photograph information are notoriously well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Sannoh device to include the use of a color determination unit and histogram computing unit to calculate the number of pixels of each color within an image to adjust the display color of photograph information in order to prevent the photograph information from disappearing in the image in the event that the image background and the photograph information are the same color.

16. In regard to claim 17, note Sannoh discloses the use of a display pattern generator which generates a pattern used to display a plurality of sets of the photograph information (paragraph 0044).

17. In regard to claim 18, note Sannoh discloses the use of a display pattern memory which memorizes a predetermined display pattern as a table (paragraph 0044).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US005331419A: note the use of the display of image data along with photograph information that is adjusted based on the background color of the image.

US005689742: note the use of the display of image data along with adjustable annotations.

US005650607A: note the use of the display of photograph information, wherein, the shape, pattern, and color are adjustable.

US 20030067551A1: note the use of the display of image data along with photograph information.

US 20010040629: note the use of the display of image data along with photograph information with different line characteristics.

US007173660B2: note the use of the display of image data along with photograph information.

US 2002008765: note the use of the display of image data along with photograph information with different line characteristics

US006888567B2: note the use of the display of image data along with shaded regions of interest.

US003812288: note the use of a camera used to capture observation images of a microscope and adjust them according to a histogram.

US004453814: note the use of photograph information that is adjusted based on the background color of the image.

US005557358A: note the use of the display of image data along with shaded regions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CSY
March 30, 2007



LIN YE
PRIMARY PATENT EXAMINER